

WHAT IS CLAIMED IS:

- 1 1. An apparatus for performing a surgical procedure comprising:
2 an inner cannula having an elongated body and a tip positioned at a
3 distal end of the elongated body; and
4 an outer expandable sheath disposed about the inner cannula and
5 configured to expand in an outward direction responsive to the
6 tip of the inner cannula passing through the sheath.
- 1 2. The apparatus of claim 1 wherein the tip has an outer dimension greater
2 than an inner dimension of the sheath and includes:
3 a proximal tapered end for facilitating passing of the tip through the
4 sheath.
- 1 3. The apparatus of claim 1 wherein the tip is transparent and the apparatus
2 further comprises:
3 an endoscope disposed within the cannula for providing endoscopic
4 visualization of the surgical procedure through the transparent
5 tip.
- 1 4. The apparatus of claim 1, wherein the outer expandable sheath further
2 comprises:

3 a first shell and a second shell adjacently aligned along longitudinal
4 edges thereof, and
5 a resilient connector attached between the first and second shells for
6 resiliently urging the longitudinal edges of the shells together.

1 5. The apparatus of claim 4 in which the outer expandable sheath further
2 comprises:

3 a retainer disposed near at least one of proximal and distal ends of the
4 shells for retaining the shells against relative longitudinal
5 movement during passage of the inner cannula through the
6 outer expandable sheath.

1 6. The apparatus of claim 1 in which the inner cannula and outer expandable
2 sheath are separable to allow the outer expandable sheath to remain in place at a
3 surgical site as the inner cannula is withdrawn.

1 7. The apparatus of claim 4 wherein the resilient connector resiliently urges a
2 distal end of the first shell toward a distal end of the second shell to form an inner
3 dimension at the distal end of the outer expandable sheath smaller than the outer
4 dimension of the tip in the absence of an outwardly expansive force applied to the
5 distal end of the outer expandable sheath in response to the tip passing through the
6 distal ends of the shells.

1 8. The apparatus of claim 7 wherein the outer expandable sheath further
2 comprises:
3 a second resilient connector disposed to resiliently urge a proximal
4 end of the first shell toward a proximal end of the second shell
5 to form an inner dimension at the proximal end of the outer
6 expandable sheath smaller than the outer dimension of the tip
7 in the absence of an outwardly expansive force applied to the
8 proximal end of the outer expandable sheath in response to the
9 tip passing through the proximal ends of the shells.

1 9. The apparatus of claim 7 in which at least one of the shells of the outer
2 expandable sheath is flexible to bend in response to passing of the tip through the
3 outer expandable sheath.

1 10. The apparatus of claim 1 in which the tip further comprises a distal tapered
2 end, a proximal tapered end, and an enlarged intermediate portion having an outer
3 dimension greater than an inner dimension of the sheath for exerting lateral
4 expansion force against the outer expandable sheath responsive to passage of the
5 tip through the outer expandable sheath.

1 11. An elongated cannula for performing endoscopic procedures comprising:

an instrument lumen within the cannula having an access port
positioned at a proximal end of the cannula for receiving
instruments into the instrument lumen;
an endoscopic lumen disposed within the cannula;
a wire lumen within the cannula;
a wire positioned within the wire lumen having a distal end attached
to a distal end of the cannula; and
an articulating lever positioned near the proximal end of the cannula
attached to the proximal end of the wire, for tensioning the wire
in a first position to deflect a distal portion of the cannula out
of alignment with a proximal portion of the cannula, and for
relaxing the wire in a second position of the lever to orient the
distal portion of the cannula substantially in alignment with the
proximal end of the cannula.

12. The elongated cannula according to claim 11 including an endoscope
disposed within the cannula including an endoscopic eyepiece disposed near a
proximal end of the endoscope in skewed angular orientation relative to the
elongated cannula and out of alignment with the access port of the instrument

- 5 lumen and lever to avoid spatial interference of the eyepiece with the lever and
- 6 with instruments received in the instrument lumen.